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Atty Dkt No. 0150-0005

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Re Application of:

David J. MILLER et al.

Group Art Unit: 3763

JUN 2 5 2002 TECHNOLOGY CENTER R3700

Serial No.: 10/014,741

Filing Date: December 10, 2001

Examiner: Unassigned

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Title: METHOD FOR INCREASING THE BATTERY LIFE OF AN ALTERNATING CURRENT IOTOPHORESIS DEVICE USING A BARRIER-MODIFYING AGENT

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, DC 20231

Sir:

This is a Supplemental Information Disclosure Statement submitted for the Examiner's consideration. Applicants respectfully request that the Examiner review and make of record the references identified below.

The references identified below were disclosed and/or cited in parent application Serial Nos. 09/783,138 and 09/783,696, both filed February 13, 2001. As such, copies of the references are not included pursuant to the provisions of 37 CFR § 1.98(d).

Document No.	Issue Date or Publication Date	Name of Patentee or Applicant
3,991,755	11/16/76	Vernon, et al.
4,141,359	2/27/79	Jacobsen, et al.
4,325,367	4/20/82	Tapper
4,340,047	7/20/82	Tapper, et al.
4,406,658	9/27/83	Lattin, et al.
4,689,039	8/25/87	Masaki
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4,734,090	3/29/88	Sibalis
4,752,285	6/21/88	Petelenz, et al.
4,764,164	8/16/88	Sasaki
4,786,278	11/22/88	Masaki
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5,997,501	12/7/99	Gross et al.			
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WO 99/30773	6/24/99	PCT
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WO 99/52589	10/21/99	PCT

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Dalziel, et al. (1950), "Effect of Frequency On Perception Currents," *AIEE Transactions* 69:1162-1168. Dalziel, et al. (1956), "Let-Go Currents and Voltages," *AIEE Transactions* 75:49.56.

Delgado-Charro et al. (1994), "Characterization of Convective Solvent Flower During Iontophoresis," Pharmaceutical Research 11(7):929-935.

Higuchi et al. (1999), "Mechanistic Aspects of Iontophoresis In Human Epidermal Membrane," Journal of Controlled Release 62:13-23.

Kim et al. (1993), "Convective Solvent Flow Across the Skin During Iontophoresis," Pharmaceutical Research 10(9):1315-1319.

Li, et al. (1999), "Pore Induction in Human Epidermal Membrane During Low to Moderate Voltage Iontophoresis: A Study Using AC Iontophoresis," Journal of Pharmaceutical Sciences 88(4):419-427.

Atty Dkt No. 0150-0005 Serial No. 10/014,741

NONPATENT DOCUMENTS

Li, et al. (1998), "Characterization of the Transport Pathways Induced During Lower to Moderate Voltage Iontophoresis in Human Epidermal Membrane," *Journal of Pharmaceutical Sciences* <u>87</u>(1):40-48.

Li, et al. (1998), "Lag Time Data for Characterizing the Pore Pathway of Intact and Chemically Pretreated Human Epidermal Membrane," *International Journal of Pharmaceutics* 170:93-108.

Li, et al. (1999), "Pore Charge Distribution Considerations In Human Epidermal Membrane Electroosmosis," *Journal of Pharmaceutical Sciences* 88(10):1044-1049.

Peck, et al. (1998), "Flux Enhancement Effects of Ionic Surfactants Upon Passive and Electroosmotic Transdermal Transport," *Journal of Pharmaceutical Sciences* 87(9):1161-1169.

Sharma, et al. (2000), "Transdermal Drug Delivery Using Electroporation. II. Factors Influencing Skin Reversibility In Electroporative Delivery of Terazosin Hydrochloride in Hairless Rats," *Journal of Pharmaceutical Sciences* 89(4):536-544.

van der Geest et al. (1996), "Iontophoresis of Bases, Nucleosides, and Nucleotides," *Pharmaceutical Research* 13(4):553-558.

Applicants would appreciate the Examiner's initialing and returning the attached PTO-1449 forms to indicate that the references have been reviewed and made of record.

This Supplemental Information Disclosure Statement is not intended as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any of the above references constitutes prior art to the present application within the meaning of 35 USC § 102.

As applicants have not yet received a first Action on the merits, no fee is required for filing this Supplemental Information Disclosure Statement. If, however, the PTO finds that for some reason a fee is found to be necessary, our Deposit Account No. 18-0580 may be charged therefor. A duplicate copy of this paper is enclosed.

Respectfully submitted,

By:

J. Elin Hartrum

Registration No. 43,663

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of

Aplete if Known				
Application Number	10/014,741			
Filing Date	December 10, 2001			
First Named Inventor	David J. MILLER et al.			
Art Unit	3763			
Examiner Name	Unassigned			
Attorney Docket Number	0150-0005			

			U.S. PATENT I	OCUMENTS			
Examiner Initials*	Cite No.	Document No.	Issue Date or Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
	AW	3,991,755	11/16/76	Vernon, et al.			
	AX	4,141,359	2/27/79	Jacobsen, et al.			
	AY	4,325,367	4/20/82	Tapper	P	FCF	IVED
	AZ	4,340,047	7/20/82	Tapper, et al.	#		V L D
	BA	4,406,658	9/27/83	Lattin, et al.		ILINLA	F 2002
	BB	4,689,039	8/25/87	Masaki		JON Z	5 2002
	BC	4,702,732	10/27/87	Powers, et al.	TECL	MOLOGY	CENTER RAZON
	BD	4,734,090	3/29/88	Sibalis	1201	HOLOGI	L. T. T. T. T. O. O.
	BE	4,752,285	6/21/88	Petelenz, et al.			
	BF	4,764,164	8/16/88	Sasaki			
	BG	4,786,278	11/22/88	Masaki			
	BH	4,792,702	12/20/88	Masaki			
	BI	4,850,956	7/25/89	Bontemps	*1.0		-
	BJ	4,931,046	6/5/90	Newman	3		20
	BK	5,002,527	3/26/91	Reller, et al.	U	J. J.	
	BL	5,006,108	4/9/91	LaPrade		至	M
	BM	5,013,293	5/7/91	Sibalis		26	N
	BN	5,019,034	5/28/91	Weaver, et al.		77	CEINE
	ВО	5,023,085	6/11/91	Francoeur, et al.		- 6	0
	BP	5,036,861	8/6/91	Sembrowich, et al.		ROOM	
	BQ	5,042,975	8/27/91	Chien, et al.		O	
	BR	5,047,007	9/10/91	McNichols, et al.			
	BS	5,056,521	10/15/91	Parsons, et al.			
	BT	5,057,072	10/15/91	Phipps			
	BU	5,140,985	8/25/92	Schroeder, et al.			
	BV	5,213,568	5/25/93	Lattin, et al.			
	BW	5,224,927	7/6/93	Tapper			
	BX	5,279,543	1/18/94	Glikfeld, et al.			
	BY	5,312,325	5/17/94	Sibalis			
	BZ	5,314,502	5/24/94	McNichols, et al.	"		
	CA	5,318,514	6/7/94	Hofmann			
	CB	5,328,452	7/12/94	Sibalis			
	CC	5,328,453	7/12/94	Sibalis			
	CD	5,328,454	7/12/94	Sibalis			
	CE	5,336,168	8/9/94	Sibalis			
	CF	5,362,307	11/8/94	Guy, et al.			
	CG	5,372,579	12/13/94	Sibalis			
	CH	5,391,195	2/21/95	Van Groningen			
	CI	5,395,310	3/7/95	Untereker, et al.			
	CJ	5,405,317	4/11/95	Myers, et al.			
	CK	5,415,629	5/16/95	Henley			
	CL	5,421,817	6/6/95	Liss, et al.			
	CM	5,423,739	6/13/95	Phipps, et al.			

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLUSURE STATEMENT BY APPLICANTS

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complete if Known					
Application Number	10/014,741				
Filing Date	December 10, 2001				
First Named Inventor	David J. MILLER et al.				
Art Unit	3763				
Examiner Name	Unassigned				
Attorney Docket Number	0150-0005				

			U.S. PATENT I	OCUMENTS			
Examiner Initials*	Cite No.	Document No.	Issue Date or Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
	CN	5,443,441	8/22/95	De Claviere			
· ·	CO	5,465,713	11/14/95	Schoendorfer			
	CP	5,499,967	3/19/96	Teillaud, et al.			
	CQ	5,538,503	7/23/96	Henley	F	FCF	IVED
-	CR	5,571,149	11/5/96	Liss, et al			
	CS	5,617,851	4/8/97	Lipkovker		IIIN 9	5-2002
	CT	5,620,580	4/15/97	Okabe, et al.		2014-2	2.5005
	CU	5,645,526	7/8/97	Flower	TEC	NOLOGY	CENTER R370
	CV	5,658,247	8/19/97	Henley	1110	0	9.7
	CW	5,667,487	9/16/97	Henley			
	CX	5,676,144	10/14/97	Schoendorfer			
	CY	5,722,397	3/3/98	Eppstein			
	CZ	5,730,714	3/24/98	Guy, et al.			*
	DA	5,771,890	6/30/98	Tamada			
	DB	5,817,012	10/6/98	Schoendorfer			·
	DC	5,827,181	10/27/98	Dias, et al.			
_	DD	5,885,211	3/23/99	Eppstein, et al.	4		Y.
	DE	5,899,876	5/4/99	Flower	()		ria .
	DF	5,911,223	6/15/99	Weaver, et al.	3	J. W.	ń n
	DG	5,928,571	7/27/99	Chan	5	之	
	DH	5,944,662	8/31/99	Schoendorfer	-	200	
	DI	5,947,921	9/7/99	Johnson, et al.	3	2	3
	DJ	5,954,685	9/21/99	Tierney	1	2002	
	DK	5,968,006	10/19/99	Hofmann		20 22	
	DL	5,978,701	11/2/99	Johnson, et al.		17 12 13 13 13 13 13 13 13 13 13 13 13 13 13	
	DM	5,983,131	11/9/99	Weaver, et al.			
	DN	5,989,409	11/23/99	Kurnik, et al.			
	DO	5,991,655	11/23/99	Gross, et al.			
	DP	5,997,501	12/7/99	Gross et al.			
	DQ	6,006,130	12/21/99	Higo, et al.			
	DR	6,010,613	1/4/2000	Walters, et al.			
	DS	6,023,629	2/8/2000	Tamada			
	DT	6,018,679	1/25/2000	Dinh, et al.			
	DU	6,041,252	3/21/2000	Walker, et al.			
-	DV	6,041,253	3/21/2000	Kost, et al.			
-	DW	6,048,337	4/11/2000	Svedman			

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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICATE

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Sheet 3 of

Complete if Known				
Application Number	10/014,741			
Filing Date	December 10, 2001			
First Named Inventor	David J. MILLER et al.			
Art Unit	3763			
Examiner Name	Unassigned			
Attorney Docket Number	0150-0005			

	•	FOREIG	N PATENT DOCUME	ENTS			
Examiner Initials*	Cite No.	Foreign Patent Document No.	Publication Date	Country	Class	Subclass	Т
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	ET	WO 97/07853	3/06/97	PCT	ψ.	70	
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Examiner Initials*	Cite ·No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	EY	Dalziel, et al. (1950), "Effect of Frequency On Perception Currents," AIEE Transactions 69:1162-1168.	
	EZ	Dalziel, et al. (1956), "Let-Go Currents and Voltages," AIEE Transactions 75:49.56.	
	FA	Delgado-Charto et al. (1994), "Characterization of Convective Solvent Flower During Iontophoresis," Pharmaceutical Research 11(7):929-935.	
	FB	Higuchi et al. (1999), "Mechanistic Aspects of Iontophoresis In Human Epidermal Membrane," Journal of Controlled Release 62:13-23.	
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Examiner	Date	-
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURES STATEMENT BY APPEGANT

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Sheet	4	of	4
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Complete if Known			
Application Number	10/014,741		
Filing Date	December 10, 2001		
First Named Inventor	David J. MILLER et al.		
Art Unit	3763		
Examiner Name	Unassigned		
Attorney Docket Number	0150-0005		

		OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
_	FF	Li, et al. (1998), "Lag Time Data for Characterizing the Pore Pathway of Intact and Chemically Pretreated Human Epidermal Membrane," <i>International Journal of Pharmaceutics</i> 170:93-108.	
	FG	Li, et al. (1999), "Pore Charge Distribution Considerations In Human Epidermal Membrane Electroosmosis," <i>Journal of Pharmaceutical Sciences</i> 88(10):1044-1049.	
	FH	Peck, et al. (1998), "Flux Enhancement Effects of Ionic Surfactants Upon Passive and Electroosmotic Transdermal Transport," <i>Journal of Pharmaceutical Sciences</i> 87(9):1161-1169.	
	FI	Sharma, et al. (2000), "Transdermal Drug Delivery Using Electroporation. II. Factors Influencing Skin Reversibility In Electroporative Delivery of Terazosin Hydrochloride in Hairless Rats," <i>Journal of Pharmaceutical Sciences</i> 89(4):536-544.	
	FJ	van der Geest et al. (1996), "Iontophoresis of Bases, Nucleosides, and Nucleotides," <i>Pharmaceutical Research</i> 13(4):553-558.	

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Signature	Considered	